

**Switched 56 Kilobit Service (3019,4021,5036)**

Switched 56 Kilobit Service enables subscribers to transmit and receive data at the rate of 56 kilobits per second. Customers requiring InterLATA/Interstate transport can subscribe to an Interexchange Carrier that has Switched 56 Kilobit Service connectivity. The telephone company may offer Switched 56 Kilobit Access Service using Feature Group D protocol arrangements.

| Generic Name of ONA Service | Product Name                     | BSE or CNS |
|-----------------------------|----------------------------------|------------|
| Switched 56 Kilobit Service | BA - Switched 56 Kilobit Service | BSA        |
|                             | BS - AccuPulse®                  | BSA        |
|                             | NX - Switchway                   | BSA        |

**FEATURE OPERATION:**

Customers establish calls by dialing 7 or 10 digits as they would for a POTS call. Calls can only terminate to another Switched 56 line and cannot be used for normal voice communications.

**TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:**

1. This feature is available in the following central office switches:

| Switch Type              | 1A ESS | 5ESS |
|--------------------------|--------|------|
| Earliest Generic Release | 1AE8   | 5E6  |

2. This service is offered from specially equipped 1A ESS and 5ESS switches using facilities that are designed to accommodate 56 kilobits per second, full duplex, synchronous transmission. Remote access arrangements are available for customer locations not within the local wire center area of the specially equipped switches.
3. Subscriber loops from the local central office to customers' premises must be 4-wire, non-loaded facilities that can be designed to meet the specifications of Digital Data Service.
4. Interoffice facilities are specially equipped and are dedicated to the transport of Switched 56 Kilobit Service traffic. Access facilities are also specially equipped and dedicated to Switched 56 Kilobit Service.
5. Customers' CPE must be Accunet Compatible.

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6. References:

- GR-334 Switched Access Service: Transmission Parameter Limits and Interface Combinations, Issue 1, June 1994 (replaces TR-NWT-000334, Issue 3).
- MDP-326-726 Digital Data System Channel Interface Specification, Issue 1, September 1983.

This service is associated with the Circuit Switched Trunk basic serving arrangement.

**Third Number Billing Inhibited (4012,7067)**

This capability provides Enhanced Services Providers (ESPs) with the ability to prevent third number calls from being billed to their switched access billing accounts, (e.g., DID numbers). This capability is provided by the operating procedures of a BOC providing operator services capabilities.

When a call is made to a BOC operator services system, and the caller requests the charges be billed to a third number, the operator makes a call to the third number for verification that the charges will be accepted. If no answer is received when the third number is called for verification of billing acceptance, the bill to third request is rejected.

In some areas, when a call is made to a BOC operator services system, and the caller requests the charges be billed to a third number, the operator queries the Line Information Database (LIDB) to determine the billed party's preference concerning bill to third number requests. If the information in the LIDB indicates to always reject bill to third party attempts, then the bill to third request is rejected.

| Generic Name of ONA Service    | Product Name                   | BSE or CNS |
|--------------------------------|--------------------------------|------------|
| Third Number Billing Inhibited | BS - Billed Number Screening * | BSE or CNS |
|                                | SWB - Billed Number Screening  | CNS        |

Reference: FR-271 (replaces FR-NWT-000271) Operator Service Systems Generic Requirements (OSSGR), Issue 000, April 2000, Issue 001 – April 2001. See FSD 85-01-0300 for information about Third Number Billing, see GR-1177 OSSGR: Special Billing Features (FSD 85 Series), A Module of OSSGR, FR-271 & FD-LECKIT-CD-01, Issue 1, June 1997, Issue 2 – December 2000.

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\* This capability is available throughout the BellSouth region upon customer request.

**Three Way Calling (3020,4020,5019,8028)**

Three Way Calling (TWC) allows a customer to add a third party to an existing conversation without operator assistance. The party initiating TWC may hold one party with privacy exclusion while dialing and talking with another party and can later include the held party in TWC.

| Generic Name of ONA Service | Product Name              | BSE or CNS |
|-----------------------------|---------------------------|------------|
| Three Way Calling           | BA - Three Way Calling    | BSE        |
|                             | BS - Three Way Calling    | CNS        |
|                             | NX - 3 Way Calling        | BSE        |
|                             | Qwest - Three Way Calling | BSE        |

**FEATURE OPERATION:**

A customer subscribing to TWC is able to add a third party to a stable call regardless of which party originated the call. The subscribing customer flashes his switch-hook, receives recall dial tone, dials the third party, and flashes the switch-hook again. The third party may be added to the call while the station is receiving ringing or the subscribing customer may speak with the third party in private prior to adding the third party to the stable call.

The third party will be disconnected from the call if the party initiating the TWC flashes the switch-hook.

If the party initiating the TWC disconnects, all parties are disconnected.

If a party other than the party initiating the TWC disconnects, the remaining two parties may continue the call.

**TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:**

1. This feature is available in the following central office switches:

| Switch Type              | 1A ESS | 5ESS | DMS-100 |
|--------------------------|--------|------|---------|
| Earliest Generic Release | 1AE8   | 5E2  | BCS17   |

2. Recursive use of TWC is limited only by resources of the switching system and transmission capabilities (A adds on B, B adds on C, C adds on D, etc.)
3. Dialing restrictions of a station continue in effect when dialing a party to be added on.
4. Speed Calling can be used when adding a party.
5. The initiator of TWC should not receive a Call Waiting tone. Other parties on the call can receive and respond to a Call Waiting tone.

6. Either or both legs of a three way call may be an interexchange or international call.
7. TWC is not available on lines with two or more parties.
8. References:
  - GR-577 LSSGR: Three-Way Calling, FSD 01-02-1301 (A Module of LSSGR, FR-64), Issue 1, June 2000 (replaces TR-TSY-000577 Issue 1 & Revision 1 – no technical changes).

This service, if offered as a BSE, is associated with the Circuit Switched Line serving arrangement.

**Traffic Data Reports (4016,5012,8016)**

This capability will provide ESPs with periodic (e.g., weekly) printed summaries of traffic data on their network facilities that are associated with central office switches. Traffic data reports include traffic information such as number of call attempts (peg count), number of blocked calls (overflow), and usage by ESP trunk group (minutes of use). The standard methods for delivering this information are paper printouts or magnetic tape in a standard format.

| Generic Name of ONA Service | Product Name  | BSE or CNS |
|-----------------------------|---|------------|
| Traffic Data Reports        | BS - Access To Traffic Data/Network Usage Information Service | BSE        |
|                             | NX - Trunk Group Measurement Reports                          | BSE        |
|                             | Qwest - Traffic Data Report Service                           | BSE        |

**References:**

- TR-NWT-000335 Voice Grade Special Access Service - Transmission Parameter Limits and Interface Combinations, Issue 3, May 1993
- Also see Recommendation X.25 of the ITU-TS [formerly CCITT] Red Book.

This service, if offered as a BSE, may be associated with the Circuit Switched Line or Trunk basic serving arrangements.

**Transmission Improvement for Circuit Switched Services (8012)**

This capability provides the ESP with a high quality transmission line for use on local switched service. It provides transmission performance between 0 and 4 dB at 1000 Hz between the network interface at the subscriber's location and the serving central office switch.

| Generic Name of ONA Service                            | Product Name                              | BSE or CNS |
|--|---|------------|
| Transmission Improvement for Circuit Switched Services | Qwest - Improved Transmission Performance | BSE        |

References: GR-334 Switched Access Service: Transmission Parameter Limits and Interface Combinations, Issue 1, June 1994 (replaces TR-NWT-000334, Issue 3).

This service, if offered as a BSE, is associated with the Circuit Switched Line basic serving arrangement.

**Uniform Access Numbers for Business Lines (4010)**

This service provides the ESP with the capability of using a single seven digit telephone number throughout the BellSouth region, Operating Company, State, Local Access and Transport Area (LATA), or NPA. The ESP's traffic is delivered to one location per Traffic Operator Position System (TOPS) Tandem switch per LATA.

| Generic Name of ONA Service               | Product Name                | BSE or CNS |
|---|-----------------------------|------------|
| Uniform Access Numbers for Business Lines | BS - Uniform Access Numbers | BSE        |

**FEATURE OPERATION:**

The ESP's Uniform Access Number (UAN) traffic is delivered from the originating end office to the associated TOPS Tandem switch over a dedicated trunk group. The TOPS Tandem switch provides the translation and routing functions required to support the service. The ESP's clients will dial the UAN, which will be routed to the associated TOPS Tandem switch. The TOPS Tandem switch translates the UAN and then routes the traffic to the ESP's location. The UAN service is required to support the Automatic Number Identification (ANI) and Custom Service Areas (CSA) basic service elements.

The originating end office translations are set to route the UAN traffic using a unique NXX as a trigger. The 440 NXX will serve the BellSouth region, the 530 NXX will serve South Central Bell only, and the 930 will serve Southern Bell only.

A dedicated one way trunk group from each of the TOPS Tandem switch subtending end offices is used to deliver the UAN traffic to the TOPS Tandem switch. This trunk group is designed to deliver the called number (UAN) and calling line ANI to the TOPS Tandem switch. The Operator Services Signaling (OSS) protocol is used to deliver the information over the trunk group.

The TOPS Tandem switch collects the incoming information and translates the UAN to determine how the call should be handled.

The UAN calls can be delivered to the ESP either through the normal circuit switched network or using dedicated trunks from the TOPS to the ESP's location. If ANI delivery is desired, the trunk side option is required.

At the present time, this service will only be offered to ESPs through the General Subscriber Services Tariff (GSST).

References: not available

This service, if offered as a BSE, is associated with the Circuit Switched Line or Circuit Switched Trunk basic serving arrangements.



### 3. Appendix 1 - Region Specific Services - Technical Descriptions for Packet Switched Access Arrangements

#### Abbreviated Call - Packet (8036)

This capability allows the customer to access predefined addresses by utilizing a predesignated unique alphanumeric character(s) in lieu of the normal call initiation process. The port is not limited to sole access of the predefined address when normal call initiation procedures are followed.

| Generic Name of ONA Service | Product Name                      | BSE or CNS |
|-----------------------------|-----------------------------------|------------|
| Abbreviated Call - Packet   | Qwest - Abbreviated Call - Packet | CNS        |

**Default Window Size - Packet (5022,8007)**

This permits the customer to select a nonstandard default window size of three in one or both directions of transmission. If nonstandard default window sizes are not selected, the default window size of two will apply to both directions of transmission. Default window sizes are set at subscription time.

| Generic Name of ONA Service  | Product Name                             | BSE or CNS |
|------------------------------|--|------------|
| Default Window Size - Packet | NX - Default Window Size                 | BSE or CNS |
|                              | Qwest - Nonstandard Window Size - Packet | BSE        |

Reference: GR-301 Public Packet Switched Network Generic Requirements (PPSNGR), Issue 2, December 1997 (replaces TR-TSY-301, Issue 2).

This service is associated with the Packet Switched X.25 and X.75 basic serving arrangements.

**Flow Control Parameter Negotiation - Packet (8003)**

Flow control allows the data receiver to limit the rate at which it accepts data by controlling the window size and maximum packet size for each direction of transmission. Negotiation is done on a per call basis during the call setup.

| Generic Name of ONA Service                 | Product Name                             | BSE or CNS |
|---|--|------------|
| Flow Control Parameter Negotiation - Packet | Qwest - Flow Control Parameters (Packet) | BSE        |

Reference: GR-301 Public Packet Switched Network Generic Requirements (PPSNGR), Issue 2, December 1997 (replaces TR-TSY-301, Issue 2).

This service, if offered as a BSE, is associated with the Packet Switched X.25 and X.75 basic serving arrangements.

**Incoming Calls Barred - Packet (5024,8001)**

Incoming Calls Barred allows the customer the option to prevent incoming virtual circuit calls from being sent to their data terminal equipment (DTE). When used in conjunction with a Closed User Group (CUG) this feature prevents individual members of the CUG from receiving calls from outside of the CUG. This option will allow call origination only.

| Generic Name of ONA Service    | Product Name                                | BSE or CNS |
|--------------------------------|---|------------|
| Incoming Calls Barred - Packet | NX - Incoming Calls Barred                  | BSE or CNS |
|                                | Qwest - CUG Incoming Access Barred (Packet) | BSE        |

Reference: GR-301 Public Packet Switched Network Generic Requirements (PPSNGR), Issue 2, December 1997 (replaces TR-TSY-301, Issue 2).

This service, if offered as a BSE, is associated with the Packet Switched X.25 and X.75 basic serving arrangements.

**Logical Channels - Packet (8005)**

Logical Channels capability allows the data terminal equipment (DTE) to derive multiple logical channels from a single physical access line. This is accomplished by specifying the logical channel number on every packet which crosses the network interface.

| Generic Name of ONA Service | Product Name                     | BSE or CNS |
|-----------------------------|----------------------------------|------------|
| Logical Channels - Packet   | Qwest - Logical Channel (Packet) | BSE        |

Reference: GR-301 Public Packet Switched Network Generic Requirements (PPSNGR), Issue 2, December 1997 (replaces TR-TSY-301, Issue 2).

This service, if offered as a BSE, is associated with the Packet Switched X.25 and X.75 basic serving arrangements.

**Logical Channel Layout - Packet (8004)**

This capability permits the arrangement of logical channels to be configured as incoming, outgoing, two way and/or private virtual circuit. The logical channel layout is established at subscription time.

| Generic Name of ONA Service     | Product Name                            | BSE or CNS |
|---------------------------------|---|------------|
| Logical Channel Layout - Packet | Qwest - Logical Channel Layout (Packet) | BSE        |

Reference: GR-301 Public Packet Switched Network Generic Requirements (PPSNGR), Issue 2, December 1997 (replaces TR-TSY-301, Issue 2).

This service, if offered as a BSE, is associated with the Packet Switched X.25 and X.75 basic serving arrangements.

**Menu Server - Packet (7000)**

This service is no longer offered by Southwestern Bell.

**Multiple Network Addresses/Port - Packet (3001,5027,8006)**

This capability allows more than one network address to be assigned to a single access port. Multiple addresses can be purchased in blocks, up to a maximum number of 1000. Messages are delivered according to predetermined customer specifications.

| Generic Name of ONA Service     | Product Name                                | BSE or CNS |
|---------------------------------|---|------------|
| Multiple Network Addresses/Port | BA - Multiple Network Addresses (Packet)    | BSE        |
|                                 | NX - Multiple Network Addresses/Port        | BSE or CNS |
|                                 | Qwest - Multiple Network Addresses (Packet) | BSE        |

Reference: Bell Atlantic Technical Reference 72211, Interface Specification for the Bell Atlantic Public Data Network, Issue C, December 1991.

This service, if offered as a BSE, is associated with the Packet Switched X.25 basic serving arrangement.



**Outgoing Calls Barred (5028,8002)**

This capability allows the customer the option to prohibit outgoing virtual calls for their data terminal equipment (DTE). When used in conjunction with a Closed User Group (CUG) this feature prevents individual members of the CUG from establishing calls outside of the CUG. This option will allow the receipt of incoming virtual circuit calls only.

| Generic Name of ONA Service    | Product Name                                | BSE or CNS |
|--------------------------------|---|------------|
| Outgoing Calls Barred - Packet | NX - Outgoing Calls Barred                  | BSE or CNS |
|                                | Qwest - CUG Outgoing Access Barred (Packet) | BSE        |

Reference: GR-301 Public Packet Switched Network Generic Requirements (PPSNGR), Issue 2, December 1997 (replaces TR-TSY-301, Issue 2).

This service, if offered as a BSE, is associated with the Packet Switched X.25 and X.75 basic serving arrangements.

**Permanent Virtual Circuit - Packet (5029,8008)**

Permanent virtual circuits are the electronic equivalent of a private line between two points. At the customer's option, a virtual circuit is established between two customer data terminal locations (DTEs) within the network on a dedicated basis. These two locations are electronically connected, operating similar to a private line between the two points. The association between the two DTEs is established via service provisioning.

| Generic Name of ONA Service        | Product Name                               | BSE or CNS |
|------------------------------------|--|------------|
| Permanent Virtual Circuit - Packet | NX - Permanent Virtual Circuit             | BSE or CNS |
|                                    | Qwest - Permanent Virtual Circuit (Packet) | BSE        |

Reference: GR-301 Public Packet Switched Network Generic Requirements (PPSNGR), Issue 2, December 1997 (replaces TR-TSY-301, Issue 2).

This service, if offered as a BSE, is associated with the Packet Switched X.25 and X.75 basic serving arrangements.

**Reverse Charge Request Option (Packet) (5030,8009)**

Reverse charging allows the originating user to request that the call be charged to the called party during call setup. The reverse charging call request is delivered to the called party only when their data terminal equipment (DTE) is configured for Reverse Charge Acceptance. If the terminating DTE does not subscribe to Reverse Charge Acceptance, the call will be cleared.

| Generic Name of ONA Service            | Product Name                           | BSE or CNS |
|--|--|------------|
| Reverse Charge Request Option (Packet) | NX - Reverse Charge Request            | BSE or CNS |
|  | Qwest - Reverse Charge Option (Packet) | BSE        |

Reference: GR-301 Public Packet Switched Network Generic Requirements (PPSNGR), Issue 2, December 1997 (replaces TR-TSY-301, Issue 2).

This service, if offered as a BSE, is associated with the Packet Switched X.25 basic serving arrangement.

#### 4. Appendix 1 - Region Specific Services - Technical Descriptions for Dedicated Access Arrangements

##### Access To Customer Premises Announcement (5035)

This feature allows an ESP to furnish customized announcement services to an Automated Call Distribution customer. ACPA connects callers in the ACD queue to customer provided announcements or music. Using this feature the ESP can provide and manage announcements on behalf of the customer. The ESP requires private line access for each ACPA arrangement.

| Generic Name of ONA Service               | Product Name                         | BSE or CNS |
|---|--------------------------------------|------------|
| Access To Customer Premises Announcements | NX - Customized Announcement Service | BSE        |

##### FEATURE OPERATION:

The ESP furnishes an announcement to the ACPA port over a private line. The ACD will automatically connect a caller in queue to the ACPA port when the feature is present.

##### TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:

1. This feature is available in the following central office switches:

|                          |         |
|--------------------------|---------|
| Switch Type              | DMS-100 |
| Earliest Generic Release | BCS36   |

2. This is a feature of Automatic Call Distribution.

**Access To Order Entry System (4004)**

This capability will allow ESPs to provide basic ordering information to the business office through a mechanized interface.

| Generic Name of ONA Service  | Product Name                                 | BSE or CNS |
|------------------------------|--|------------|
| Access To Order Entry System | BS - Administrative Management Service (AMS) | BSE or CNS |

**FEATURE OPERATION:**

A new offering, currently using the BellSouth project name of Administrative Management Service (AMS), will provide a mechanized interface for customers to provide service ordering information to the appropriate business office.

This service will be offered on a dial-up or dedicated basis. The ESPs will not have direct access to the Order Entry System, but will have access through the AMS front-end processor. The front-end processor will provide the necessary security and information screening.

References: not available.

This service, if offered as a BSE, is associated with the Access To Operations Support Systems Information BSE (which is associated with the Dedicated Digital (< 64 kbps) basic serving arrangement).

**ADSL Service (4032)**

ADSL Service is an interstate data access service that allows Internet Service Providers (ISPs) or Network Service Providers (NSPs) to provide service to their customer(s) using Asymmetric Digital Subscriber Line technology. This capability allows ISPs/NSPs to establish a point-to-point virtual circuit between an end user premises location and another location designated by the subscribing ISP/NSP. ADSL Service allows downstream speeds from 192 Kbps to 6.0 Mbps and upstream speeds from 192 Kbps to 640 Kbps. ADSL Service requires ATM switch connectivity between the ATM switch and the ISP's/NSP's designated location.

| Generic Name of ONA Service | Product Name                | BSE or CNS |
|-----------------------------|-----------------------------|------------|
| ADSL Service                | BS – BellSouth ADSL Service | BSE        |

**DS0-B Subrate Multiplexing Service (4015)**

DS0-B Subrate Multiplexer (SRM) service provides time division multiplexing of multiple client digital derived data channels into a single standard interface for efficient interconnection to an ESP.

| <b>Generic Name of ONA Service</b> | <b>Product Name</b>  | <b>BSE or CNS</b> |
|------------------------------------|----------------------|-------------------|
| DS0-B Subrate Multiplexing Service | BS - DS0-B Interface | BSE or CNS        |

**FEATURE OPERATION:**

Service is established via a service order placed by the ESP with the local operating company. Appropriate dedicated transport facilities (including local channel and applicable interoffice mileage elements) are also ordered for access to the SRM. The ESP negotiates and makes arrangements with its clients to connect their individual derived data channels to the SRM. These orders must be coordinated with the ESP in order to ensure adequate facilities are available and appropriate channel assignments, as specified by the ESP, are made.

**TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:**

1. This capability is independent of central office switch type.
2. The DS0-B SRM is interconnected to the ESP's client via an appropriate derived data channel service in the local serving office.
3. The ESP interconnects to the DS0-B SRM via an appropriate four-wire dedicated transport facility.
4. The DS0-B signal is a standard DDS signal as specified in Technical Advisory TA-TSY-00280.

**References:**

See BellSouth documents TR73548 "Derived Channel Access Service Digital Data Over Voice Network Interface Specifications", Issue 1 June 1990 and Addendum 1 March 1991.

This service, if offered as a BSE, is associated with the Dedicated Derived Channel BSA.

**High Capacity Digital Hand-Off Service (3026)**

High Capacity Digital Hand-Off Service carries voice grade local exchange and Channel Services between the customer's serving central office and the customer's compatible premises equipment using a DS1 facility with the D4 format. Up to 24 local exchange voice and Channel Services can be supported on the facility. The facility is handed-off to the customer in the D4 format.

| Generic Name of ONA Service            | Product Name                                | BSE or CNS |
|--|---|------------|
| High Capacity Digital Hand-Off Service | BA - High Capacity Digital Hand-Off Service | BSE        |

**FEATURE OPERATION:**

At the time the service is ordered the customer must designate which services are to be carried on each of the 24 channels in the DS1 facility. Future additions and changes to channel assignments must be coordinated with the Telephone Company.

Where the serving central office is a digital switch, the facility may run from the customer's high capacity interface directly into the central office switch. Only DID trunks may be carried over this directly connected facility.

**TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:**

1. The High Capacity Digital Hand-Off facility is a digital channel operating at a transmission speed of 1.544 Mbps. It is a simultaneous two-way transmission media using serial, bipolar, return-to-zero, isochronous, alternating mark inversion format.
2. 1000 Channel metallic services and Digital Data Service may not be transported over these facilities.
3. Reference: GR-54 DS1 High-Capacity Digital Service End User Metallic Interface Specifications, Issue 1, December 1995 (replaces TR-NPL-000054, Issue 1)

This service is a BSE associated with the Dedicated High Capacity Digital (1.544 Mbps) Basic Serving Arrangement in the local exchange tariff and an alternative of Line Side BSA in the access tariff.



**Inband Signaling (3018)**

Inband Signaling provides the ability to order analog voice grade Special Access circuits with signaling arrangements as described in TR-NWT-000335.

| Generic Name of ONA Service | Product Name          | BSE or CNS |
|-----------------------------|-----------------------|------------|
| Inband Signaling            | BA - Inband Signaling | BSE        |

**Reference:**

- TR-NWT-000335 Voice Grade Special Access Service - Transmission Parameter Limits and Interface Combinations, Issue 3, May 1993
- MDP-326-584 - Table 4 Data Communications Using Voiceband Private Line Channels, Issue 1, October 1973

This service, if offered as a BSE, is associated with the Dedicated Voice Grade basic serving arrangement.